

IN THE CLAIMS:

Please cancel Claims 1-12 and add new Claims 13-25:

13. A process for producing spherical nickel hydroxide comprising:

(a) subjecting a nickel electrode to anodic dissolution in a completely intermixed electrolysis cell and using an electrolysis brine that is introduced into the cell and that has (i) a chlorine ion content ranging from 20 to 50 g/l (ii) an ammonia content ranging from 1 to 7 g/l of (iii) a pH value ranging from 9.5 to 11.5 and (iv) a temperature of 45 to 60°C; and

(b) precipitating nickel hydroxide.

14. The process according to Claim 13, wherein before introducing the electrolysis brine into the electrolysis cell, the pH of the electrolysis brine is adjusted to a value ranging from 10 to 10.5 by addition of alkali metal hydroxide or hydrochloric acid to the brine.

15. The process according to Claim 13, wherein the brine has a circulation rate that is at least 20 cm/s.

16. The process according to Claim 13, wherein the molar ratio of chloride ions to ammonia is from 2 to 10.

17. The process according to Claim 13, wherein the electrolysis brine has an average residence time ranging from 1 to 5 hours.

18. The process according to Claim 13 further comprising continuously introducing into the electrolysis cell a doping metal ion selected from the group consisting of Co, Zn, Mg, Cu, Cr, Fe, Sc, Y, La, lanthanoids, B, Ga, Mn, Cd and Al.

19. The process according to Claim 18, wherein the doping element ions are produced by anodic oxidation of the corresponding metals.

20. The process according to Claim 13 further comprising discharging brine containing dispersed nickel hydroxide powder from the electrolysis cell, separating nickel hydroxide powder and returning the brine to the electrolysis cell.

21. The process according to Claim 13 further comprising discharging brine containing dispersed nickel hydroxide powder from the electrolysis cell and introducing the brine containing dispersed nickel hydroxide into a downstream electrolysis cell having a metallic cobalt anode.

22. The process according to Claim 21 further comprising discharging brine containing nickel hydroxide powder coated with cobalt hydroxide from the electrolysis cell containing metallic cobalt, separating the nickel hydroxide powder and returning the brine to the electrolysis cell.

23. A nickel hydroxide powder made by Claim 13.

24. The nickel hydroxide powder of Claim 23, wherein the powder is an electrode material of a secondary storage battery.

25. The nickel hydroxide powder of Claim 23, wherein the powder is a precursor material for the production of an ultrafine powdered metallic nickel.

#### IN THE SPECIFICATION

On page 1, below the Title, please add:

This application is the National Stage Application of PCT/EP00/03684, which claims a priority from German Application 199 21 313.5, filed May 7, 1999.

#### BACKGROUND--

On page 2, line 20, please add:

#### DESCRIPTION

On page 8, line 3, please add:

The invention is further described in the following illustrative examples in which all parts and percentages are by weight unless otherwise indicated.

On page 9, below line 30, please add:

Although the present invention has been described in detail with reference to certain preferred versions thereof, other variations are possible. Therefore, the spirit and scope of the appended claims should not be limited to the description of the versions contained therein.